

What is claimed is:

1. An apparatus for recording and reproducing digital data, comprising:
 - receiving means for receiving first compressed data composed of a plurality of packets, said first compressed data including a plurality of programs multiplexed in a time division manner;
 - data separating means for extracting specific compressed audio/video data corresponding to a desired program from the first compressed data received by the receiving means;
 - record control means for generating second compressed data including the compressed audio/video data extracted by the data separating means;
 - recording means for recording the second compressed data generated by the record control means;
 - data reproducing means for decoding the compressed audio/video data included in the second compressed data; and
 - time division control means for controlling the transmitting and reading of the second compressed data to and from the recording means in a time division manner.
2. The apparatus according to claim 1, wherein said first compressed data is MPEG2-TS data and said second compressed data is MPEG2-PES data.
3. The apparatus according to claim 2, wherein a plurality of said MPEG2-PES data is recorded by the recording means as one stream of data.

- 1 4. The apparatus according to claim 3, further comprising reproduction control means for
2 reading the second compressed data from the recording means and transmitting the second
3 compressed data to the data reproducing means.
- 1 5. The apparatus according to claim 4, further comprising monitoring means for monitoring
2 the amount of data transmitted from the reproduction control means to the data reproducing
3 means.
- 1 6. The apparatus according to claim 5, further comprising selecting means for selectively
2 transmitting the compressed audio/video data extracted by the data separating means to the
3 data reproducing means.
7. The apparatus according to claim 6, further comprising video data decoding section and
audio data decoding section for decoding the compressed video data and compressed audio
data, respectively, in the data reproducing means.
8. The apparatus according to claim 7, wherein said recording means is a hard disk.
9. A method for recording and reproducing digital data, comprising the steps of:
- 2 receiving first compressed data, said first compressed data including a plurality of programs
3 multiplexed in a time division manner;
- 4 extracting specific compressed audio/video data corresponding to a desired program from
5 the first compressed data;

6 generating second compressed data including the compressed audio/video data extracted in
7 the extracting step;

8 recording the second compressed data in recording means;

9 reading the second compressed data from the recording means, and subsequently decoding
10 and reproducing the second compressed data by data reproducing means; and

11 controlling the transmitting and reading of the second compressed data to and from the
12 recording means in a time division manner.

1 10. The method according to claim 9, wherein said first compressed data is MPEG2-TS data
2 and said second compressed data is MPEG2-PES data.

3 11. The method according to claim 10, wherein a plurality of said MPEG2-PES data is recorded
4 by the recording means as one stream of data.

5 12. The method according to claim 11, wherein a plurality of said MPEG2-PES data is recorded
6 as one stream of data in the order in which the compressed audio/video data is received by
7 the receiving means.

8 13. The method according to claim 12, further comprising the step of selectively transmitting
9 the compressed audio/video data extracted in the extracting step to the data reproducing
10 means.

1 14. The method according to claim 13, further comprising the step of monitoring the amount of
2 said second compressed data decoded and reproduced by data reproducing means.

- 1 15. An apparatus for recording and reproducing digital data, comprising:
- 2 a receiver for receiving first compressed data composed of MPEG2-TS data, said first
- 3 compressed data including a plurality of programs multiplexed in a time division manner;
- 4 a filter for extracting specific compressed audio/video data corresponding to a desired
- 5 program from the first compressed data received by the receiver;
- 6 a data unloader for generating second compressed data composed of MPEG2-PES data,
- 7 including the compressed audio/video data extracted by the filter;
- 8 a recorder for recording the second compressed data generated by the data unloader;
- 9 a decoder for decoding the compressed audio/video data included in the second compressed
- 10 data; and
- 11 a time division controller for controlling the transmitting and reading of the second
- 12 compressed data to and from the recorder in a time division manner.
- 13 16. The apparatus according to claim 15, wherein a plurality of said MPEG2-PES data is
- 14 recorded by the recorder as one stream of data.
- 15 17. The apparatus according to claim 16, further comprising reproduction control means for
- 16 reading the second compressed data from the recorder and transmitting the second
- 17 compressed data to the decoder.
- 18 18. The apparatus according to claim 17, further comprising monitoring means for monitoring
- 19 the amount of data transmitted from the reproduction control means to the decoder.

